LAMPIRAN A

DAFTAR TAHANAN JENIS

BEBERAPA BATUAN DAN MINERAL

LAMPIRAN A

DAFTAR TAHANAN JENIS

DARI BEBERAPA MINERAL DAN BATUAN

(Telford W, 1972)

Tabel 1. Tahanan Jenis Metal dan Elemen

Elemen	Tahanan Jenis (Ohm m)	Elemen	Tahanan Jenis (Ohm m)
Antimony	$4{,}5 \times 10^{-7}$	Molybdenum	$5{,}7 \times 10^{-8}$
Arsenic	$2{,}2 \times 10^{-7}$	Nickel	$7{,}8 \times 10^{-8}$
Bismuth	$1{,}2 \times 10^{-9}$	Platinum	10^{-7}
Copper	$1{,}7 \times 10^{-6}$	Silver	$1{,}6 \times 10^{-8}$
Gold	$2{,}4 \times 10^{-8}$	Sulphur	10^{-4}
Graphite	10^{-3}	Tellurium	10^{-3}
Iron	10^{-7}	Tin	$1{,}1 \times 10^{-7}$
Lead	2.2×10^{-7}	Uranium	3.0×10^{-7}
Mercury	9.6×10^{-7}	Zinc	5.8×10^{-7}

Tabel 2. Tahanan Jenis Batuan Beku dan Metamorf

Type Batuan	Tahanan Jenis (Ohm m)	Type Batuan	Tahanan Jenis (Ohm m)
Granite	3×10^2 - 10^5	Basalt	$10 - 1.3 \times 10^7$
Albite	$3 \times 10^2 - 3.3 \times 10^3$	Schists	$20 - 10^4$
Synite	10^2 - 10^6	Tuffs	2×10^3 (wet)
Diorite	$10 - 5 \times 10^4$ (wet)		-10^5 (dry)
	-3.3×10^3 (dry)	Graphite	$10 - 10^2$
Dacite	2×10^4	Slates	$6 \times 10^2 - 4 \times 10^7$
Andesit	4.5×10^4	Gneis	6.8×10^4 - 3×10^6
Diabase	20×10^7	Marble	$10^2 - 2.5 \times 10^8$
Gabro	10^3 - 10^6		

Tabel 3. Tahanan Jenis Batuan Sedimen

Type Batuan	Tahanan Jenis (Ohm m)
Conglomerat	2×10^3 - 10^4
Samsstones	$1 - 6.4 \times 10^2$
Limestone	50 - 10^7
Dolomit	$3.5 \times 10^2 - 5 \times 10^3$
Maris	3 – 70
Clays	1 – 10
Alluviun dan Sands	10 –100
Oil Sands	4 – 800

Tabel 4. Beberapa Tahanan Jenis

Jenis	Tahanan Jenis (Ohm m)
Dry Region	100 – 500
Arid Regyon	200 – 1000
Soil Water	1 – 100
Rain Water	30 – 1000
Sea Water	order of 0.2
Ice	$10^5 – 10^8$
Consulidated Sediments	10 –10000
Unconsulidated Sediments	1 – 100
Massive Sulfids	$10^{-4} – 1$

LAMPIRAN B

LEMBAR PENCATATAN PENDUGAAN

GEOLISTRIK

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 1/ I V

Lokasi : Ds Retno (Ubil)

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	1	232.700	232.700	1458.530
2	2	11.78	1	143.300	143.300	1684.890
3	2.5	18.8	1	92.440	92.440	1738.950
4	3	27.5	1	74.960	74.960	2057.520
5	4	49.5	1	49.610	49.610	2451.140
6	5	77.78	1	34.440	34.440	1673.910
7	6	112	1	24.960	24.960	2791.480
8	7	200	1	17.730	17.730	2712.740
9	8	200	1	11.780	11.780	2357.490
10	10	462	1	5.336	5.336	1735.570
11	12	85.58	2	4.991	2.492	1125.430
MN/2 = a = 2.50 m						
11	12	85.58	2	23.990	11.983	1025.500
12	15	137.5	2	8.658	4.325	594.670
13	20	347.5	2	2.579	1.288	318.720
14	25	388.92	2	1.116	0.588	226.570
15	30	561.77	5	1.688	0.337	189.410
16	40	1001.8	5	0.748	0.150	147.700
17	50	1567.5	5	0.359	0.072	112.340
18	65	2051.7	5	0.132	0.026	69.970
MN/2 = a = 10.00 m						
18	65	648	5	0.575	0.115	24.360
19	80	989.98	5	0.248	0.049	49.080
20	100	1560	5	0.096	0.019	29.850
21	120	2400	5	0.035	0.007	17.120
22	140	3064.2	5	0.012	0.002	7.350
23	160	4007.1				
24	180	5075.6				
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 2/IV
Lokasi : Ds Ubil

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	1	229.600	229.600	1879.030
2	2	11.78	1	135.100	135.100	1589.350
3	2.5	18.8	1	71.700	71.700	1349.920
4	3	27.5	1	43.000	43.000	1181.400
5	4	49.5	1	19.850	19.850	981.730
6	5	77.78	1	10.890	10.890	846.540
7	6	112	1	6.902	6.902	772.430
8	7	200	1	4.322	4.322	661.360
9	8	200	1	2.954	2.954	591.200
10	10	462	1	1.416	1.416	461.040
11	12	85.58	2	1.588	0.794	358.430
MN/2 = a = 2.50 m						
11	12	85.58	2	8.220	4.108	351.550
12	15	137.5	2	4.417	2.208	303.550
13	20	347.5	2	2.084	1.042	257.660
14	25	388.92	2	1.166	0.583	226.570
15	30	561.77	2	0.730	0.366	205.920
16	40	1001.8	5	0.817	0.163	163.620
17	50	1567.5	5	0.382	0.076	119.700
18	65	2051.7	5	0.143	0.287	76.060
MN/2 = a = 10.00 m						
18	65	648	5	0.543	0.109	70.350
19	80	989.98	10	0.433	0.043	42.840
20	100	1560	10	0.139	0.014	21.610
21	120	2400	10	0.050	0.005	12.230
22	140	3064.2	10	0.017	0.002	5.200
23	160	4007.1				
24	180	5075.6				
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 3/IV
Lokasi : Ds Jogo Simo

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	1	92.930	92.930	582.780
2	2	11.78	1	49.960	49.960	587.890
3	2.5	18.8	1	30.170	30.170	568.300
4	3	27.5	1	19.860	19.860	545.910
5	4	49.5	1	9.498	9.498	469.730
6	5	77.78	1	5.310	5.310	412.650
7	6	112	1	3.393	3.393	379.880
8	7	200	1	2.358	2.358	360.970
9	8	200	1	1.697	1.697	339.830
10	10	462	1	0.992	0.992	322.940
11	12	85.58	2	1.305	0.652	294.570
MN/2 = a = 2.50 m						
11	12	85.58	2	6.097	3.047	260.780
12	15	137.5	2	3.346	1.673	229.960
13	20	347.5	2	1.639	0.820	202.240
14	25	388.92	2	0.902	0.451	175.290
15	30	561.77	2	0.557	0.279	156.590
16	40	1001.8	2	0.237	0.119	118.360
17	50	1567.5	5	0.284	0.057	88.990
18	65	2051.7	5	0.106	0.021	56.460
MN/2 = a = 10.00 m						
18	65	648	5	0.425	0.085	55.010
19	80	989.98	10	0.342	0.034	33.840
20	100	1560	10	0.107	0.011	16.630
21	120	2400	10	0.041	0.004	10.030
22	140	3064.2	10	0.019	0.009	5.810
23	160	4007.1	20	0.018	0.001	2.250
24	180	5075.6	20	0.006	0.000	1.520
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 3/IV
Lokasi : Ds Jogo Simo

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	1	92.930	92.930	582.780
2	2	11.78	1	49.960	49.960	587.890
3	2.5	18.8	1	30.170	30.170	568.300
4	3	27.5	1	19.860	19.860	545.910
5	4	49.5	1	9.498	9.498	469.730
6	5	77.78	1	5.310	5.310	412.650
7	6	112	1	3.393	3.393	379.880
8	7	200	1	2.358	2.358	360.970
9	8	200	1	1.697	1.697	339.830
10	10	462	1	0.992	0.992	322.940
11	12	85.58	2	1.305	0.652	294.570
MN/2 = a = 2.50 m						
11	12	85.58	2	6.097	3.047	260.780
12	15	137.5	2	3.346	1.673	229.960
13	20	347.5	2	1.639	0.820	202.240
14	25	388.92	2	0.902	0.451	175.290
15	30	561.77	2	0.557	0.279	156.590
16	40	1001.8	2	0.237	0.119	118.360
17	50	1567.5	5	0.284	0.057	88.990
18	65	2051.7	5	0.106	0.021	56.460
MN/2 = a = 10.00 m						
18	65	648	5	0.425	0.085	55.010
19	80	989.98	10	0.342	0.034	33.840
20	100	1560	10	0.107	0.011	16.630
21	120	2400	10	0.041	0.004	10.030
22	140	3064.2	10	0.019	0.009	5.810
23	160	4007.1	20	0.018	0.001	2.250
24	180	5075.6	20	0.006	0.000	1.520
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 5/IV

Lokasi : Ds Jogomertan

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	1	148.2	148.06	929.81
2	2	11.78	1	55.42	55.362	652.16
3	2.5	18.8	1	25.14	25.121	473.53
4	3	27.5	1	13.5	13.496	371.14
5	4	49.5	1	5.005	5.0081	247.58
6	5	77.78	1	2.703	2.7016	210.04
7	6	112	1	1.601	1.6004	179.24
8	7	200	1	1.06	1.06	162.33
9	8	200	1	0.807	0.8072	161.66
10	10	462	1	0.511	0.5112	166.44
11	12	85.58	2	0.68	0.3401	153.58
MN/2 = a = 2.50 m						
11	12	85.58	2	3.32	1.6593	142
12	15	137.5	2	2.095	1.421	143.97
13	20	347.5	2	1.18	0.5902	146.87
14	25	388.92	2	0.256	0.3776	146.01
15	30	561.77	2	0.462	0.231	129.72
16	40	1001.8	2	0.196	0.0984	98.53
17	50	1567.5	2	0.091	0.0457	71.6
18	65	2051.7	5	0.081	0.0162	42.94
MN/2 = a = 10.00 m						
18	65	648	5	0.31	0.0621	40.19
19	80	989.98	10	0.254	0.0254	25.13
20	100	1560	10	0.112	0.0012	17.41
21	120	2400	10	0.04	0.0039	9.54
22	140	3064.2	20	0.055	0.0022	8.27
23	160	4007.1	20	0.028	0.0014	5.6
24	180	5075.6	20	0.013	0.0006	3.04
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 1 / VI
Lokasi : Ds Jaladri

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	16.6	3.322	20.862
2	2	11.78	5	8.58	1.715	20.202
3	2.5	18.8	5	5.23	1.045	19.646
4	3	27.5	5	3.48	0.695	19.105
5	4	49.5	5	1.85	0.369	18.258
6	5	77.78	5	1.73	0.325	17.437
7	6	112	5	0.73	0.145	16.284
8	7	200	5	0.52	0.103	15.774
9	8	200	10	0.77	0.076	15.221
10	10	462	10	0.32	0.031	13.999
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	10	1.88	0.188	16.271
12	15	137.5	10	1.02	0.131	18.004
13	20	347.5	10	0.5	0.05	12.371
14	25	388.92	20	0.73	0.036	13.995
15	30	561.77	20	0.51	0.023	14.039
16	40	1001.8	20	0.26	0.013	13.017
17	50	1567.5	20	0.14	0.006	9.401
18	65	2051.7	50	0.22	0.004	10.602
MN/2 = a = 10.00 m						
18	65	648	50	1.01	0.02	12.954
19	80	989.98	50	0.61	0.011	10.885
20	100	1560	50	0.16	0.008	12.441
21	120	2400	50	0.12	0.005	11.21
22	140	3064.2	50	0.08	0.004	12.252
23	160	4007.1	50	0.06	0.003	12.016
24	180	5075.6	100	0.34	0.003	15.221
25	200	6270	100	0.3	0.003	18.802
MN/2 = a = 20.00 m						
	250	4880	100	0.46	0.004	19.504
	300	7040	100	0.22	0.002	14.074

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 2 / VI
Lokasi : Ds Jaladri

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	14.4	2.879	18.081
2	2	11.78	5	7.73	1.545	18.201
3	2.5	18.8	5	4.78	0.958	17.972
4	3	27.5	5	3.16	0.62	17.043
5	4	49.5	5	1.77	0.351	17.318
6	5	77.78	10	1.15	0.231	17.882
7	6	112	10	1.67	0.167	18.775
8	7	200	10	1.17	0.117	17.918
9	8	200	10	1.04	0.104	20.829
10	10	462	10	0.54	0.059	25.289
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	10	2.86	0.287	24.839
12	15	137.5	10	2.09	0.208	28.587
13	20	347.5	10	1.36	0.17	33.893
14	25	388.92	10	0.83	0.082	31.879
15	30	561.77	20	1.14	0.057	32.008
16	40	1001.8	20	0.64	0.032	32.044
17	50	1567.5	20	0.36	0.019	29.771
18	65	2051.7	20	0.26	0.009	23.856
MN/2 = a = 10.00 m						
18	65	648	20	0.96	0.046	29.805
19	80	989.98	20	0.54	0.027	26.719
20	100	1560	50	0.83	0.016	24.881
21	120	2400	50	0.51	0.1	22.462
22	140	3064.2	50	0.3	0.006	18.378
23	160	4007.1	50	0.15	0.003	12.016
24	180	5075.6	50	0.1	0.002	12.684
25	200	6270	100	0.05	0.0015	9.371
MN/2 = a = 20.00 m						
	250	4880	100	0.02	0.002	9.754
	300	7040	100	0.01	0.001	7.037

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 3 / VI
Lokasi : Ds Adiwerna

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	15.8	3.177	19.951
2	2	11.78	5	8.25	1.049	19.425
3	2.5	18.8	5	3.68	0.735	13.818
4	3	27.5	5	2.18	0.436	11.985
5	4	49.5	10	1.35	0.27	13.359
6	5	77.78	10	1.99	0.194	15.472
7	6	112	10	1.61	0.161	17.969
8	7	200	10	1.31	0.131	19.905
9	8	200	10	1.1	0.129	25.836
10	10	462	10	0.66	0.066	29.804
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	10	3.29	0.328	28.334
12	15	137.5	10	2.31	0.231	31.611
13	20	347.5	10	1.45	0.144	35.625
14	25	388.92	10	0.95	0.094	*36.544*
15	30	561.77	20	1.32	0.065	36.501
16	40	1001.8	20	0.66	0.032	32.088
17	50	1567.5	20	0.39	0.019	29.771
18	65	2051.7	20	0.21	0.01	26.507
MN/2 = a = 10.00 m						
18	65	648	20	0.92	0.045	29.157
19	80	989.98	20	0.61	0.031	29.668
20	100	1560	20	0.39	0.019	29.556
21	120	2400	20	0.26	0.013	29.201
22	140	3064.2	20	0.21	0.009	27.567
23	160	4007.1	50	0.31	0.006	24.03
24	180	5075.6	50	0.21	0.004	20.294
25	200	6270	50	0.15	0.003	18.802
MN/2 = a = 20.00 m						
	250	4880	100	0.31	0.003	14.631
	300	7040	100	0.15	0.0015	10.555

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 4 / VI
Lokasi : Ds Adiwerna

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	40.4	8.084	50.767
2	2	11.78	5	18.1	3.623	42.678
3	2.5	18.8	5	10.7	2.151	40.438
4	3	27.5	5	7.3	1.461	40.162
5	4	49.5	5	4.18	0.837	41.414
6	5	77.78	5	2.58	0.517	40.196
7	6	112	5	1.71	0.341	38.297
8	7	200	5	1.1	0.239	36.6
9	8	200	5	0.91	0.181	36.251
10	10	462	10	0.41	0.081	36.579
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	10	3.74	0.373	32.283
12	15	137.5	10	2.32	0.231	31.748
13	20	347.5	10	1.35	0.134	33.151
14	25	388.92	10	0.84	0.083	32.267
15	30	561.77	10	0.58	0.058	32.571
16	40	1001.8	20	0.65	0.032	32.044
17	50	1567.5	20	0.43	0.021	32.904
18	65	2051.7	20	0.27	0.013	34.459
MN/2 = a = 10.00 m						
18	65	648	50	1.18	0.059	32.283
19	80	989.98	50	1.98	0.039	31.748
20	100	1560	50	1.29	0.025	33.151
21	120	2400	50	0.89	0.017	32.267
22	140	3064.2	100	0.66	0.013	32.571
23	160	4007.1	100	1.01	0.01	32.044
24	180	5075.6	100	0.92	0.009	32.904
25	200	6270	100	0.82	0.008	34.459
MN/2 = a = 20.00 m						
	250	4880	100	1.01	0.015	48.773
	300	7040	100	0.62	0.01	42.233

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 5 / VI
Lokasi : Ds Rangkah

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	9.36	1.871	11.749
2	2	11.78	5	5.11	1.023	12.051
3	2.5	18.8	5	3.37	0.673	12.652
4	3	27.5	5	2.33	0.469	12.892
5	4	49.5	5	1.42	0.283	14.002
6	5	77.78	5	1.01	0.201	15.627
7	6	112	10	1.51	0.15	16.846
8	7	200	10	1.15	0.118	18.071
9	8	200	10	0.95	0.097	19.427
10	10	462	10	3.68	0.056	25.233
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	10	0.64	0.264	22.849
12	15	137.5	10	1.98	0.197	27.075
13	20	347.5	10	1.23	0.123	30.431
14	25	388.92	10	0.82	0.081	31.491
15	30	561.77	20	1.16	0.057	32.008
16	40	1001.8	20	0.64	0.031	31.042
17	50	1567.5	20	0.36	0.018	28.203
18	65	2051.7	20	0.21	0.01	26.507
MN/2 = a = 10.00 m						
18	65	648	20	0.84	0.042	27.21
19	80	989.98	20	0.51	0.024	23.751
20	100	1560	20	0.28	0.013	20.216
21	120	2400	20	0.13	0.006	1.477
22	140	3064.2	50	0.17	0.002	9.801
23	160	4007.1	50	0.1	0.002	8.011
24	180	5075.6	50	0.06	0.001	5.073
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 1 / VII
Lokasi : Ds Bedji

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	14.4	2.879	18.193
2	2	11.78	5	6.08	1.217	14.336
3	2.5	18.8	5	3.08	0.615	11.562
4	3	27.5	5	1.79	0.357	9.813
5	4	49.5	5	0.91	0.187	9.252
6	5	77.78	5	0.61	0.119	9.252
7	6	112	5	0.45	0.089	9.995
8	7	200	10	0.71	0.071	10.721
9	8	200	10	0.59	0.058	11.616
10	10	462	10	0.69	0.033	14.902
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	20	3.14	0.157	13.588
12	15	137.5	20	2.21	0.111	15.118
13	20	347.5	20	1.41	0.071	17.565
14	25	388.92	20	1.01	0.051	19.438
15	30	561.77	20	0.71	0.037	20.777
16	40	1001.8	50	0.15	0.023	23.031
17	50	1567.5	50	0.74	0.015	23.503
18	65	2051.7	50	0.46	0.009	23.856
MN/2 = a = 10.00 m						
18	65	648	50	1.92	0.038	24.622
19	80	989.98	50	1.24	0.024	23.751
20	100	1560	50	0.77	0.015	23.26
21	120	2400	50	0.49	0.009	20.216
22	140	3064.2	50	0.31	0.006	18.378
23	160	4007.1	50	0.16	0.003	12.016
24	180	5075.6	50	0.05	0.001	5.073
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 2 / VII
Lokasi DS Bedji

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	5.075	1.015	6.34
2	2	11.78	5	2.51	0.499	5.878
3	2.5	18.8	5	1.65	0.329	6.185
4	3	27.5	5	1.17	0.233	6.405
5	4	49.5	5	0.76	0.151	7.471
6	5	77.78	5	0.53	0.105	8.16
7	6	112	5	0.34	0.077	8.647
8	7	200	10	0.6	0.062	9.495
9	8	200	10	0.52	0.057	10.214
10	10	462	10	0.31	0.029	13.096
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	10	1.52	0.157	13.069
12	15	137.5	20	2.22	0.11	15.118
13	20	347.5	20	1.49	0.074	18.307
14	25	388.92	20	1.08	0.053	20.604
15	30	561.77	20	0.8	0.041	23.023
16	40	1001.8	20	0.5	0.024	24.033
17	50	1567.5	20	0.34	0.016	25.069
18	65	2051.7	20	0.52	0.011	26.507
MN/2 = a = 10.00 m						
18	65	648	20	2.06	0.041	26.565
19	80	989.98	20	1.31	0.026	25.729
20	100	1560	20	0.71	0.014	21.771
21	120	2400	20	0.45	0.009	20.216
22	140	3064.2	50	0.31	0.005	15.315
23	160	4007.1	100	0.3	0.003	12.016
24	180	5075.6				
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 3 / VII
Lokasi : Ds Gondosuli

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	1.079	1.079	6.776
2	2	11.78	5	0.579	0.579	6.221
3	2.5	18.8	5	0.367	0.367	6.889
4	3	27.5	5	0.257	0.257	7.064
5	4	49.5	5	0.155	0.155	7.669
6	5	77.78	5	0.105	0.105	8.163
7	6	112	5	0.079	0.079	8.877
8	7	200	10	0.065	0.015	9.954
9	8	200	10	0.054	0.054	10.815
10	10	462	10	0.031	0.005	13.548
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	10	1.61	0.159	13.761
12	15	137.5	10	1.11	0.111	15.118
13	20	347.5	10	0.71	0.069	17.071
14	25	388.92	10	0.46	0.045	17.494
15	30	561.77	10	0.34	0.033	18.531
16	40	1001.8	10	0.18	0.017	17.023
17	50	1567.5	10	0.08	0.007	10.968
18	65	2051.7	10	0.06	0.005	13.253
MN/2 = a = 10.00 m						
18	65	648	20	0.24	0.023	14.902
19	80	989.98	20	0.32	0.015	14.844
20	100	1560	20	0.17	0.008	12.441
21	120	2400	20	0.11	0.004	8.984
22	140	3064.2				
23	160	4007.1				
24	180	5075.6				
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 4 / VII
Lokasi : Ds Puliharjo

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	9.09	1.819	11.423
2	2	11.78	5	4.37	0.875	10.307
3	2.5	18.8	5	2.84	0.567	10.659
4	3	27.5	5	2.07	0.401	11.023
5	4	49.5	5	1.21	0.241	11.924
6	5	77.78	5	0.81	0.159	12.362
7	6	112	5	0.59	0.117	13.139
8	7	200	10	0.44	0.087	13.324
9	8	200	10	0.36	0.071	14.219
10	10	462	10	0.36	0.035	15.806
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	10	5.86	0.585	14.811
12	15	137.5	10	1.21	0.121	16.492
13	20	347.5	20	1.53	0.076	18.802
14	25	388.92	20	1.03	0.057	19.827
15	30	561.77	20	0.73	0.036	20.216
16	40	1001.8	20	0.37	0.011	18.021
17	50	1567.5	50	0.56	0.011	17.235
18	65	2051.7	50	0.024	0.0048	12.27
MN/2 = a = 10.00 m						
18	65	648	50	0.48	0.019	12.311
19	80	989.98	50	0.51	0.011	9.896
20	100	1560	100	0.47	0.004	6.221
21	120	2400				
22	140	3064.2				
23	160	4007.1				
24	180	5075.6				
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 5 / VII
Lokasi : Ds Buayan utara

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	5	12.4	2.482	15.586
2	2	11.78	5	5.69	1.136	13.382
3	2.5	18.8	5	3.34	0.667	12.539
4	3	27.5	5	2.17	0.443	11.903
5	4	49.5	5	1.19	0.239	11.825
6	5	77.78	5	0.75	0.149	11.584
7	6	112	5	0.52	0.103	11.567
8	7	200	10	0.77	0.076	11.639
9	8	200	10	0.61	0.061	12.016
10	10	462	10	0.31	0.029	13.096
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	10	1.56	0.155	13.415
12	15	137.5	10	1.07	0.106	14.568
13	20	347.5	10	0.68	0.067	16.575
14	25	388.92	10	0.42	0.041	15.939
15	30	561.77	10	0.29	0.028	15.723
16	40	1001.8	10	0.15	0.014	14.019
17	50	1567.5	20	0.15	0.007	12.534
18	65	2051.7	20	0.07	0.0035	7.952
MN/2 = a = 10.00 m						
18	65	648	20	0.33	0.016	10.362
19	80	989.98	20	0.14	0.007	6.967
20	100	1560	50	0.17	0.003	4.665
21	120	2400	50	0.008	0.001	2.246
22	140	3064.2				
23	160	4007.1				
24	180	5075.6				
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 1 / VIII
Lokasi : Ds Polehan

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	1	40.8	40.8	252.286
2	2	11.78	1	22.9	22.9	270.586
3	2.5	18.8	1	15.49	15.49	291.212
4	3	27.5	1	11.1	11.1	302.664
5	4	49.5	1	6.33	6.33	313.653
6	5	77.78	1	3.39	3.39	307.724
7	6	112	1	2.52	2.52	284.01
8	7	200	1	1.79	1.79	273.985
9	8	200	1	1.28	1.28	256.158
10	10	462	2	0.95	0.95	214.961
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	2	4.88	2.412	208.758
12	15	137.5	2	2.75	1.377	189.254
13	20	347.5	5	3.25	0.649	60.562
14	25	388.92	5	1.77	0.353	137.235
15	30	561.77	5	1.07	0.213	119.612
16	40	1001.8	5	0.48	0.095	95.11
17	50	1567.5	5	0.24	0.042	73.642
18	65	2051.7	5	0.07	0.014	37.111
MN/2 = a = 10.00 m						
18	65	648	5	0.39	0.062	40.172
19	80	989.98	10	0.32	0.032	31.667
20	100	1560	10	0.05	0.005	7.775
21	120	2400	20	0.01		1.123
22	140	3064.2				
23	160	4007.1				
24	180	5075.6				
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LEMBAR PENCATATAN PENDUGAAN GEOLISTRIK

Nomor : 2 / VIII
Lokasi : ds Polehan

No	AB/2=b (m)	K	I (mA)	V (mV)	R (Ohm)	pa (Ohm m)
MN/2 = a = 0.50 m						
1	1.5	6.28	1	7.219	7.219	45.335
2	2	11.78	1	4.77	4.77	56.178
3	2.5	18.8	1	3.48	3.48	65.593
4	3	27.5	1	2.68	2.68	73.645
5	4	49.5	1	1.79	1.79	88.519
6	5	77.78	1	1.31	1.31	100.997
7	6	112	1	0.93	0.93	104.344
8	7	200	1	0.74	0.74	113.177
9	8	200	2	1.15	0.574	114.961
10	10	462	2	0.51	0.256	115.885
11	12	85.58				
MN/2 = a = 2.50 m						
11	12	85.58	5	6.64	1.327	114.851
12	15	137.5	5	3.97	0.794	109.129
13	20	347.5	5	2.24	0.448	110.835
14	25	388.92	5	1.41	0.281	108.555
15	30	561.77	5	0.95	0.189	106.134
16	40	1001.8	10	0.89	0.088	88.121
17	50	1567.5	10	0.47	0.046	72.076
18	65	2051.7	10	0.14	0.014	50.363
MN/2 = a = 10.00 m						
18	65	648	10	0.81	0.081	52.483
19	80	989.98	10	0.35	0.034	33.646
20	100	1560	10	0.11	0.011	15.551
21	120	2400	10	0.03	0.003	6.738
22	140	3064.2				
23	160	4007.1				
24	180	5075.6				
25	200	6270				
MN/2 = a = 20.00 m						
		4880				
		7040				

LAMPIRAN C

INTERPRETASI DATA DENGAN

MATCHING KURVE

LAMPIRAN C

INTERPRETASI DATA DENGAN MATCHING CURVE

I. JALUR I

1.1 Titik Sounding 1

Langkah Pertama

P_1 (1.4 ; 660)

$t_1 = d_1 = 1.4$ m

$\rho_1 = 660\ \Omega m$

$\rho_2 / \rho_1 = 1.5$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 1.5 \times 660 = 990\ \Omega m$

Langkah Kedua

$P_2 = (12.6 ; 750)$

$t_a = 12.6$ m

$\rho_a = 750\ \Omega m$

$\rho_3 / \rho_a = 0.07$ (Kurva standart dan Kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.07 \times 750 = 52.5\ \Omega m$

Sumbu kurva bantu K dihimpitkan pada P_1 didapat P_2 pada $t_2 / t_1 = 0.75$

$T_2 = t_2 / t_1 \times t_1 = 0.75 \times 1.4 = 1.05$

$d_2 = t_1 + t_2 = 1.4 + 1.05 = 2.45$ m

Langkah Ketiga

$P_3 = (14; 5.2)$

$t_{a1} = 14$ m

$\rho_{a1} = 52\ \Omega m$

$\rho_4 / \rho_{a1} = 0.1$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.1 \times 52 = 5.2\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_1 didapat P_2 pada $t_2 / t_1 = 0.75$

$t_3 = t_2 / t_1 \times t_a = 0.75 \times 12 = 9.45$

$d_3 = d_2 + t_3 = 2{,}45 + 9{,}45 = 11.9$ m

Dari keseluruhan proses didapat :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	660	1.4
2	990	2.4
3	52.5	11.9
4	5.2	~

I.2. Titik sounding 2

Langkah Pertama

$P_1 = (1.2 ; 123)$

$t_1 = d_1 = 1.2$ m

$\rho_1 = 123\ \Omega m$

$\rho_2 / \rho_1 = 1.5$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 1.5 \times 123 = 184.5\ \Omega m$

Langkah Kedua

$P_2 = (7.6 ; 178)$

$t_a = 7.5$

$\rho_a = 178\ \Omega m$

$\rho_3 / \rho_a = 0.4$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.4 \times 178 = 71.2\ \Omega m$

Sumbu kurva bantu K dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 4.5$

$t_2 = t_2 / t_1 \times t_1 = 4.5 \times 1.2 = 5.4$ m

$d_2 = t_1 + t_2 = 1.2 + 5.4 = 6.6$ m

Langkah Ketiga

$P_3 = (10 ; 100)$

$t_{a1} = 10$ m

$\rho_{a1} = 100\ \Omega m$

$\rho_4 / \rho_{a1} = 0.025$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.025 \times 100 = 2.5\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 0.75$

$t_3 = t_2 / t_1 \times t_a = 0.75 \times 7.6 = 5.6$ m

$d_3 = d_2 + t_3 = 6.6 + 5.6 = 12.2$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	123	1.2
2	184.5	6.6
3	71.2	12.2
4	2.5	~

1.3. Titik Sounding 3

Langkah Pertama

$P_1 = (1.1 ; 67)$

$T_1 = d_1 = 1.1$ m

$\rho_1 = 67\ \Omega m$

$\rho_2 / \rho_1 = 7$ (Kurva standart dan kurva bantu A)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 7 \times 67 = 469\ \Omega m$

Langkah Kedua

$P_2 = (5.9 ; 200)$

$t_a = 5.9$ m

$\rho_a = 200\ \Omega m$

$\rho_3 / \rho_a = 0.8$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.8 \times 200 = 16\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 1.4$

$t_2 = t_2 / t_1 \times t_1 = 1.4 \times 1.1 = 1.54$ m

$d_2 = t_1 + t_2 = 1.1 + 1.54 = 2.64$ m

Langkah Ketiga

$P_3 = (30 ; 168)$

$T_{a1} = 30$ m

$\rho_{a1} = 168\ \Omega m$

$\rho_4 / \rho_{a1} = 0.025$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.025 \times 168 = 2.5\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 3.5$

$t_3 = t_2 / t_1 \times t_a = 3.5 \times 5.9 = 20.76$ m

$d_3 = d_2 + t_3 = 2.64 + 20.76 = 23.40$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	67	1.1
2	469	2.64
3	160	23.4
4	4.2	~

I.4. Titik Sounding 4

Langkah Pertama

$P_1 = (0.7 ; 170)$

$t_1 = d_1 = 0.7$ m

$\rho_1 = 170\ \Omega m$

$\rho_2 / \rho_1 = 0.2$ (Kurva standart dan kurva bantu H)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.2 \times 170 = 34\ \Omega m$

Langkah Kedua

$P_2 = (2.7 ; 43)$

$t_a = 2.7$ m

$\rho_a = 43\ \Omega m$

$\rho_3 / \rho_a = 2.5$ (Kurva standart dan kurva bantu A)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 2.5 \times 43 = 107.5\ \Omega m$

Sumbu kurva bantu H dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 2.6$

$t_2 = t_2 / t_1 \times t_1 = 2.6 \times 0.7 = 1.82$ m

$d_2 = t_1 + t_2 = 0.7 + 1.82 = 2.52$ m

Langkah Ketiga

$P_3 = (15 : 120)$

$T_{a1} = 15$ m

$\rho_{a1} = 120\ \Omega m$

$\rho_4 / \rho_{a1} = 1.5$ (Kurva standart dan kurva bantu K)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 1./5 \times 120 = 180\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 4$

$T_3 = t_2 / t_1 \times t_a = 4 \times 2.7 = 11.18$ m

$d_3 = d_2 + t_3 = 2.52 + 11.18 = 13.7$ m

Langkah Keempat

$P_4 = (31 ; 148)$

$T_{a2} = 31$ m

$\rho_{a2} = 148\ \Omega m$

$\rho_5 / \rho_{a2} = 0.025$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.025 \times 148 = 3.7\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 1$

$T_4 = t_2 / t_1 \times t_{a1} = 1 \times 15 = 15$ m

$d_4 = t_4 + d_3 = 15 + 13.7 = 28.7$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	170	0.7
2	34	2.52
3	107.5	13.7
4	180	28.7
5	3.7	~

I.5. Titik Sounding 5

Langkah Pertama

$P_1 = (1.1 ; 155)$

$t_1 = d_1 = 1.1$ m

$\rho_1 = 155\ \Omega m$

$\rho_2 / \rho_1 = 0.65$ (Kurva standart dan kurva bantu H)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.65 \times 155 = 100.75\ \Omega m$

Langkah Kedua

$P_2 = (10 ; 110)$

$T_a = 10$ m

$\rho_a = 110\ \Omega m$

$\rho_3 / \rho_a = 1.5$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 1.5 \times 110 = 165\ \Omega m$

Sumbu kurva bantu H dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 7$

$T_2 = t_2 / t_1 \times t_1 = 7 \times 1.1 = 7.7$ m

$d_2 = t_1 + t_2 = 1.1 + 7{,}7 = 8.8$ m

Langkah Ketiga

$P_3 = (22 : 140)$

$T_{a1} = 22$ m

$\rho_{a1} = 140\ \Omega m$

$\rho_4 / \rho_{a1} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.05 \times 140 = 7\ \Omega m$

Sumbu kurva bantu K dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 1.2$

$T_3 = t_2 / t_1 \times t_a = 1.2 \times 10 = 12$ m

$d_3 = d_2 + t_3 = 12 + 8.8 = 20.8$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	155	1.1
2	100.75	8.8
3	165	20.8
4	7	~

II. JALUR 2

2.1. Titik Sounding 1

Langkah Pertama

$P_1 = (1.1 ; 1200)$

$t_1 = d_1 = 1.1$ m

$\rho_1 = 1200\ \Omega m$

$\rho_2 / \rho_1 = 1.5$ (Kurva standart dan kurva bantu A)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 1.5 \times 1200 = 1800\ \Omega m$

Langkah Kedua

$P_2 = (5.4 ; 2500)$

$t_a = 5.4$ m

$\rho_a = 2500\ \Omega m$

$\rho_3 / \rho_a = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.05 \times 2500 = 12\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 5$

$t_2 = t_2 / t_1 \times t_1 = 1.1 \times 5 = 5.5$ m

$d_2 = t_1 + t_2 = 1.1 + 5.5 = 6.6$ m

Langkah Ketiga

$P_3 = (12 : 850)$

$T_{a1} = 12$ m

$\rho_{a1} = 850\ \Omega m$

$\rho_4 / \rho_{a1} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.05 \times 850 = 180\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 1$

$T_3 = t_2 / t_a \times t_a = 1 \times 5.4 = 5.4$ m

$d_3 = d_2 + t_3 = 6.6 = 5.4 = 12$ m

Langkah Keempat

$P_4 = (\ ;340)$

$T_{a2} =$ m

$\rho_{a2} = 360\ \Omega m$

$\rho_5 / \rho_{a2} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.05 \times 360 = 18\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 0.45$

$t_4 = t_2 / t_1 \times t_{a1} = 0.45 \times 12 = 5.5$ m

$d_4 = d_3 + t_4 = 12 + 5.5 = 17.5$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	1200	1.1
2	1800	6.6
3	125	12
4	42.5	17.5
5	18	~

2.2. Titik Sounding 2

2.2. Titik Sounding 2

Langkah Pertama

$P_1 = (1.4 ; 2100)$

$t_1 = d_1 = 1.4$ m

$\rho_1 = 2100\ \Omega m$

$\rho_2 / \rho_1 = 1.25$ (Kurva standart dan kurva bantu H)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 1.25 \times 2100 = 2625\ \Omega m$

Langkah Kedua

$P_2 = (3.5 ; 2200)$

$t_a = 3.5$ m

$\rho_a = 2200\ \Omega m$

$\rho_3 / \rho_a = 2$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 2 \times 2200 = 4400\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 2.1$

$t_2 = t_2 / t_1 \times t_1 = 2.1 \times 1.4 = 2.94$ m

$d_2 = t_1 + t_2 = 1.4 + 2.94 = 4.43$ m

Langkah Ketiga

$P_3 = (12 : 2300)$

$T_{a1} = 12$ m

$\rho_{a1} = 2300\Omega m$

$\rho_4 / \rho_{a1} = 0.5$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 005 \times 2300 = 1150\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 1.28$

$t_3 = t_2 / t_a \times t_a = 1{,}28 \times 3.5 = 4.5$ m

$d_3 = d_2 + t_3 = 4.5 + 3.5 = 8$ m

Langkah Keempat

$P_4 = (10 ; 2300)$

$t_{a2} = 10$ m

$\rho_{a2} = 2300\ \Omega m$

$\rho_5 / \rho_{a2} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.01 \times 2300 = 23\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 0.16$

$t_4 = t_2 / t_1 \times t_{a1} = 0.16 \times 12 = 2$ m

$d_4 = d_3 + t_4 = 8 + 2 = 10$ m

Langkah kelima

$P_5 = (17.5 ; 1100)$

$t_{a3} = 17.5$ m

$\rho_{a2} = 1100\ \Omega m$

$\rho_5 / \rho_{a2} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.01 \times 1100 = 11\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 0.16$

$t_5 = t_2 / t_1 \times t_{a2} = 0.16 \times 12 = 2$ m

$d_5 = d_4 + t_5 = 10 + 1 = 11$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	2100	1.4
2	2625	4.34
3	4400	8
4	1150	10
5	23	17.5
6	11	~

2.3. Titik Sounding 3

Langkah Pertama

$P_1 = (1.4 ; 800)$

$t_1 = d_1 = 1.4$ m

$\rho_1 = 800\ \Omega m$

$\rho_2 / \rho_1 = 5$ (Kurva standart dan kurva bantu A)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 5 \times 800 = 2800\ \Omega m$

Langkah Kedua

$P_2 = (3.8 ; 1500)$

$t_a = 4$ m

$\rho_a = 1500\ \Omega m$

$\rho_3 / \rho_a = 1.5$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 1.5 \times 1500 = 2250\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 4$

$t_2 = t_2 / t_1 \times t_1 = 4 \times 1.4 = 5.6$ m

$d_2 = t_1 + t_2 = 1.4 + 5.6 = 7$ m

Langkah Ketiga

$P_3 = (12 : 1550)$

$T_{a1} = 16$ m

$\rho_{a1} = 1550\ \Omega m$

$\rho_4 / \rho_{a1} = 0.1$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.1 \times 1550 = 115\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 0.5$

$t_3 = t_2 / t_a \times t_a = 0.5 \times 3.8 = 4.5$ m

$d_3 = d_2 + t_3 = 7 + 1.9 = 8.9$ m

Langkah Keempat

$P_4 = (10 ; 2500)$

$t_{a2} = 10$ m

$\rho_{a2} = 2500$ Ωm

$\rho_5 / \rho_{a2} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.01 \times 2500 = 25$ Ωm

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 1.25$

$t_4 = t_2 / t_1 \times t_{a1} = 1.25 \times 12 = 15.1$ m

$d_4 = d_3 + t_4 = 8.9 + 15.1 = 24$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	800	1.4
2	2800	7
3	2250	8.9
4	155	24
5	25	~

2.4. Titik Sounding 4

Langkah Pertama

$P_1 = (1.2 ; 800)$

$t_1 = d_1 = 1.2$ m

$\rho_1 = 800\ \Omega m$

$\rho_2 / \rho_1 = 0.6$ (Kurva standart dan kurva bantu H)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.6 \times 800 = 480\ \Omega m$

Langkah Kedua

$P_2 = (3.3 ; 700)$

$t_a = 3.3$ m

$\rho_a = 700\ \Omega m$

$\rho_3 / \rho_a = 1.5$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 1.5 \times 700 = 1050\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 4$

$t_2 = t_2 / t_1 \times t_1 = 4 \times 1.2 = 4.8$ m

$d_2 = t_1 + t_2 = 1.2 + 4.8 = 6$ m

Langkah Ketiga

$P_3 = (13.5 : 650)$

$T_{a1} = 10$ m

$\rho_{a1} = 650\ \Omega m$

$\rho_4 / \rho_{a1} = 0.15$` (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.15 \times 650 = 97.5\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 1$

$t_3 = t_2 / t_a \times t_a = 1 \times 3.3 = 3.3$ m

$d_3 = d_2 + t_3 = 6 + 3.3 = 9.3$ m

Langkah Keempat

$P_4 = (32 ; 170)$

$t_{a2} = 32$ m

$\rho_{a2} = 170\ \Omega m$

$\rho_5 / \rho_{a2} = 0.10$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.10 \times 170 = 17\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 2$

$t_4 = t_2 / t_1 \times t_{a1} = 2 \times 13.5 = 21.7$ m

$d_4 = d_3 + t_4 = 9.3 + 21.7 = 31$ m

Langkah kelima

$P_5 = (40 ; 75)$

$t_{a3} = 40$ m

$\rho_{a2} = 75\ \Omega m$

$\rho_5 / \rho_{a2} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.05 \times 75 = 3.75\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 0.25$

$t_5 = t_2 / t_1 \times t_{a2} = 0.25 \times 32 = 8$ m

$d_5 = d_4 + t_5 = 31 + 8 = 38$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	800	1.2
2	480	6
3	1050	9.3
4	97.5	31
5	17	38
6	3.75	~

2.5. Titik Sounding 5

Langkah Pertama

$P_1 = (1 ; 40)$

$t_1 = d_1 = 1$ m

$\rho_1 = 40\ \Omega m$

$\rho_2 / \rho_1 = 40$ (Kurva standart dan kurva bantu A)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 40 \times 40 = 1600\ \Omega$

Langkah Kedua

$P_2 = (2.1 ; 115)$

$t_a = 2.1$ m

$\rho_a = 115\ \Omega m$

$\rho_3 / \rho_a = 5$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 5 \times 115 = 575\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 1$`

$t_2 = t_2 / t_1 \times t_1 = 1 \times 1.2 = 1.2$ m

$d_2 = t_1 + t_2 = 1 + 1.2 = 2.2$ m

Langkah Ketiga

$P_3 = (15 : 460)$

$T_{a1} = 15$ m

$\rho_{a1} = 460\ \Omega m$

$\rho_4 / \rho_{a1} = 0.25$` (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.25 \times 460 = 115\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 8.5$

$t_3 = t_2 / t_a \times t_a = 8.5 \times 2.1 = 17.8$ m

$d_3 = d_2 + t_3 = 17.8 + 2.2 = 20$ m

Langkah Keempat

$P_4 = (20 ; 450)$

$t_{a2} = 20$ m

$\rho_{a2} = 450\ \Omega m$

$\rho_5 / \rho_{a2} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.01 \times 450 = 4.5\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 2.5$

$t_4 = t_2 / t_1 \times t_{a1} = 2.5 \times 15 = 20$ m

$d_4 = d_3 + t_4 = 20 + 4 = 24$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	40	1
2	1600	2.2
3	575	20
4	115	24
5	4.5	~

III. JALUR 3

3.1. Titik Sounding 1

Langkah Pertama

$P_1 = (0.6 ; 4.5)$

$t_1 = d_1 = 0.6$ m

$\rho_1 = 4.5\ \Omega m$

$\rho_2 / \rho_1 = 0.5$ (Kurva standart dan kurva bantu H)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.5 \times 4.5 = 22.5\ \Omega m$

Langkah Kedua

$P_2 = (2.4 ; 7.5)$

$t_a = 5$ m

$\rho_a = 7.5\ \Omega m$

$\rho_3 / \rho_a = 1.5$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 1.5 \times 7.5 = 11.25\ \Omega m$

Sumbu kurva bantu H dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 5.5$

$t_2 = t_2 / t_1 \times t_1 = 5.5 \times 0.6 = 3.4$ m

$d_2 = t_1 + t_2 = 0.6 + 3.4 = 4$ m

Langkah Ketiga

$P_3 = (7 : 9)$

$T_{a1} = 7$ m

$\rho_{a1} = 9\ \Omega m$

ρ_4 / ρ_{a1} =-3.5 (Kurva standart dan kurva bantu K)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 3.5 \times 9 = 31.5$ Ωm

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 0.5$

$t_3 = t_2 / t_a \times t_a = 0.5 \times 2.4 = 1.2$ m

$d_3 = d_2 + t_3 = 1.2 + 4 = 5.2$ m

Langkah Keempat

$P_4 = (50 ; 21.4)$

$T_{a2} = 50$ m

$\rho_{a2} = 21.4$ Ωm

$\rho_5 / \rho_{a2} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.05 \times 21.4 = 1.07$ Ωm

Sumbu kurva bantu K dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 3$

$T_4 = t_2 / t_a \times t_{a1} = 3 \times 7 = 32$ m

$d_4 = d_3 + t_4 = 21 + 5.2 = 26.2$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	45	0.6
2	22.5	4
3	11.25	5.14
4	31.5	26.04
5	1.07	~

3.2. Titik Sounding 2

Langkah Pertama

$P_1 = (0.5 ; 44)$

$t_1 = d_1 = 0.5$ m

$\rho_1 = 44\ \Omega m$

$\rho_2 / \rho_1 = 0.2$ (Kurva standart dan kurva bantu H)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.2 \times 44 = 88\ \Omega m$

Langkah Kedua

$P_2 = (7.5 ; 88)$

$t_a = 7.5$ m

$\rho_a = 88\ \Omega m$

$\rho_3 / \rho_a = 1.25$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 1.25 \times 88 = 11\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 14$

$t_2 = t_2 / t_1 \times t_1 = 14 \times 0.5 = 7$ m

$d_2 = t_1 + t_2 = 7 + 0.5 = 7.5$ m

Langkah Ketiga

$P_3 = (32 : 11)$

$T_{a1} = 32$ m

$\rho_{a1} = 11\ \Omega m$

$\rho_4 / \rho_{a1} = 0.1$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.1 \times 11 = 1.1 \ \Omega m$

Sumbu kurva bantu K dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 3.2$

$T_3 = t_2 / t_a \times t_a = 3.2 \times 7.5 = 23.9$ m

$d_3 = d_2 + t_3 = 23.9 + 7.5 = 31.4$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	44	0.5
2	88	7.5
3	11	31.4
4	1.1	~

3.3. Titik Sounding 3

Langkah Pertama

$P_1 = (0.7 ; 20)$

$t_1 = d_1 = 0.7$ m

$\rho_1 = 20\ \Omega m$

$\rho_2 / \rho_1 = 0.5$ (Kurva standart dan kurva bantu H)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.5 \times 20 = 10\ \Omega m$

Langkah Kedua

$P_2 = (3.2 ; 12)$

$T_a = 3.2$ m

$\rho_a = 12\ \Omega m$

$\rho_3 / \rho_a = 1.5$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 1.5 \times 12 = 18\ \Omega m$

Sumbu kurva bantu H dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 2.4$

$t_2 = t_2 / t_1 \times t_1 = 2.4 \times 0.7 = 1,7$ m

$d_2 = t_1 + t_2 = 1.7 + 0.7 = 2.4$ m

Langkah Ketiga

$P_3 = (12 : 13)$

$t_{a1} = 12$ m

$\rho_{a1} = 13\ \Omega m$

$\rho_4 / \rho_{a1} = 0.5$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.5 \times 13 = 6.5\ \Omega m$

Sumbu kurva bantu K dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 2.15$

$T_3 = t_2 / t_1 \times t_a = 2.15 \times 3.2 = 6.9$ m

$d_3 = d_2 + t_3 = 6.9 + 2.4 = 31.4$ m

Langkah Keempat

$P_4 = (55; 6)$

$T_{a2} = 55$ m

$\rho_{a2} = 6\ \Omega m$

$\rho_5 / \rho_{a2} = 0.025$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.025 \times 6 = 0.15\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 3.5$

$T_4 = t_2 / t_1 \times t_{a1} = 3.5 \times 12 = 42$ m

$d_4 = d_3 + t_4 = 42 + 9.3 = 51.3$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	20	0.7
2	10	2.4
3	18	9.3
4	6.5	51.3
5	0.15	~

3.4. Titik Sounding 4

Langkah Pertama

$P_1 = (1.1 ; 24.5)$

$t_1 = d_1 = 1.1$ m

$\rho_1 = 24.5\ \Omega m$

$\rho_2 / \rho_1 = 0.4$ (Kurva standart dan kurva bantu Q)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.4 \times 24.5 = 9.8\ \Omega m$

Langkah Kedua

$P_2 = (9 ; 12)$

$T_a = 9$ m

$\rho_a = 12\ \Omega m$

$\rho_3 / \rho_a = 0.8$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.8 \times 12 = 9.6\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 6$

$t_2 = t_2 / t_1 \times t_1 = 1.1 \times 6 = 6.6$ m

$d_2 = t_1 + t_2 = 1.1 + 6.6 = 7.7$ m

Langkah Ketiga

$P_3 = (50 : 9.6)$

$T_{a1} = 50$ m

$\rho_{a1} = 9.6\ \Omega m$

3.5. Titik Sounding 5

Langkah Pertama

$P_1 = (1.2 ; 20)$

$t_1 = d_1 = 1.2$ m

$\rho_1 = 20\ \Omega m$

$\rho_2 / \rho_1 = 0.65$ (Kurva standart dan kurva bantu Q)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.65 \times 20 = 13\ \Omega m$

Langkah Kedua

$P_2 = (19.3 ; 13)$

$t_a = 19.3$ m

$\rho_a = 13\ \Omega m$

$\rho_3 / \rho_a = 0.5$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.5 \times 13 = 6.5\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 13$

$t_2 = t_2 / t_1 \times t_1 = 13 \times 1.2 = 15.6$ m

$d_2 = t_1 + t_2 = 15.6 + 1.2 = 16.8$ m

Langkah Ketiga

$P_3 = (80 : 7.5)$

$T_{a1} = 80$ m

$\rho_{a1} = 7.5\ \Omega m$

$\rho_4 / \rho_{a1} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.05 \times 7.5 = 0.375$ Ωm

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 3$

$t_3 = t_2 / t_a \times t_a = 3 \times 19.3 = 58$

$d_3 = d_2 + t_3 = 16.8 + 58 = 74.8$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	20	1.2
2	13	16.8
3	6.5	74.6
4	0.375	~

$\rho_4 / \rho_{a1} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.05 \times 9.6 = 0.48\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 4.5$

$T_3 = t_2 / t_1 \times t_a = 4.5 \times 7.9 = 35.7$ m

$D_3 = d_2 + t_3 = 35.7 + 7.7 = 43.4$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	24.5	1.1
2	9.8	7.7
3	9.6	43.4
4	0.48	~

IV. JALUR 4

4.1. Titik Sounding 1

Langkah Pertama

$P_1 = (1.4 ; 1300)$

$t_1 = d_1 = 1.4$ m

$\rho_1 = 1300\ \Omega m$

$\rho_2 / \rho_1 = 3.5$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 3.5 \times 1300 = 4550\ \Omega m$

Langkah Kedua

$P_2 = (6.5 ; 3300)$

$t_a = 6.5$ m

$\rho_a = 3300\ \Omega m$

$\rho_3 / \rho_a = 0.1$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.1 \times 3300 = 330\ \Omega m$

Sumbu kurva bantu K dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 2$

$t_2 = t_2 / t_1 \times t_1 = 2 \times 1.4 = 2.8$ m

$d_2 = t_1 + t_2 = 1.4 + 2.8 = 4.2$ m

Langkah Ketiga

$P_3 = (8.5 : 1200)$

$t_{a1} = 8.5$ m

$\rho_{a1} = 1200\ \Omega m$

$\rho_4 / \rho_{a1} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.05 \times 1200 = 60\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 0.5$

$t_3 = t_2 / t_a \times t_a = 0.5 \times 6.5 = 3.3$ m

$d_3 = d_2 + t_3 = 3.3 + 4.2 = 7.5$ m

Langkah Keempat

$P_4 = (16 ; 320)$

$t_{a2} = 16$ m

$\rho_{a2} = 320\ \Omega m$

$\rho_5 / \rho_{a2} = 0.15$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.15 \times 320 = 0.15\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 1$

$t_4 = t_2 / t_a \times t_{a1} = 1 \times 8.5 = 8.5$ m

$d_4 = d_3 + t_4 = 7.5 + 8.5 = 16$

Langkah Kelima

$P_4 = (30 ; 17)$

$t_{a2} = 30$ m

$\rho_{a3} = 17\ \Omega m$

$\rho_5 / \rho_{a2} = 0.15$ (Kurva standart dan kurva bantu Q)

$\rho_6 = \rho_6 / \rho_{a3} \times \rho_{a3} = 0.15 \times 17 = 2.55\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 1$

$t_4 = t_2 / t_a \times t_{a1} = 1 \times 16 = 16$ m

$d_5 = d_4 + t_5 = 16 + 16 = 32$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	1300	1.4
2	4550	4.2
3	330	7.5
4	60	16
5	48	32
6	2.55	~

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.3 \times 340 = 102\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 0.5$

$t_3 = t_2 / t_a \times t_a = 0.5 \times 13 = 6.5$

$d_3 = d_2 + t_3 = 5.5 + 6.5 = 12$ m

Langkah Keempat

$P_4 = (28 ; 6)$

$t_{a2} = 28$ m

$\rho_{a2} = 6\ \Omega m$

$\rho_5 / \rho_{a2} = 0.3$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.3 \times 6 = 1.8\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 3$

$t_4 = t_2 / t_a \times t_{a1} = 3 \times 9 = 27$

$d_4 = d_3 + t_4 = 7.5 + 12 = 27$

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	2200	1.1
2	660	5.5
3	42.5	12
4	102	27
5	1.8	~

4.4 Titik Sounding 4

Langkah Pertama

$P_1 = (1.4 ; 370)$

$t_1 = d_1 = 1.4$ m

$\rho_1 = 370\ \Omega m$

$\rho_2 / \rho_1 = 0.5$ (Kurva standart dan kurva bantu H)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.5 \times 370 = 185\ \Omega m$

Langkah Kedua

$P_2 = (3.5 ; 270)$

$t_a = 3.5$ m

$\rho_a = 270\ \Omega m$

$\rho_3 / \rho_a = 1.25$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 1.25 \times 270 = 337.5\ \Omega m$

Sumbu kurva bantu H dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 1.28$

$t_2 = t_2 / t_1 \times t_1 = 1.28 \times 1.4 = 1.8$ m

$d_2 = t_1 + t_2 = 1.4 + 1.8 = 3.2$ m

Langkah Ketiga

$P_3 = (8.7 : 300)$

$t_{a1} = 8.7$ m

$\rho_{a1} = 300\ \Omega m$

$\rho_4 / \rho_{a1} = 0.3$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.3 \times 300 = 50\ \Omega m$

Sumbu kurva bantu K dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 1.5$

$t_3 = t_2 / t_a \times t_a = 1.5 \times 3.5 = 5.3$ m

$d_3 = d_2 + t_3 = 3.2 + 5.3 = 8.5$ m

Langkah Keempat

$P_4 = (25 ; 150)$

$t_{a2} = 25$ m

$\rho_{a2} = 150\ \Omega m$

$\rho_5 / \rho_{a2} = 0.1$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.1 \times 150 = 15\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 3$

$t_4 = t_2 / t_a \times t_{a1} = 2 \times 8.7 = 17.5$ m

$d_4 = d_3 + t_4 = 8.5 + 17.5 = 26$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	370	1.4
2	185	3.2
3	337.5	8.5
4	90	26
5	15	~

4.5. Titik Sounding 5

Langkah Pertama

$P_1 = (1.2 ; 1000)$

$t_1 = d_1 = 1.2$ m

$\rho_1 = 1000\ \Omega m$

$\rho_2 / \rho_1 = 0.1$ (Kurva standart dan kurva bantu Q)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.1 \times 1000 = 100\ \Omega m$

Langkah Kedua

$P_2 = (6 ; 170)$

$t_a = 1.2$ m

$\rho_a = 1000\ \Omega m$

$\rho_3 / \rho_a = 0.6$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.6 \times 170 = 102\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 4$

$t_2 = t_2 / t_1 \times t_1 = 4 \times 1.2 = 4.8$ m

$d_2 = t_1 + t_2 = 1.2 + 4.8 = 6$ m

Langkah-Ketiga

$P_3 = (23 : 160)$

$t_{a1} = 23$ m

$\rho_{a1} = 160\ \Omega m$

$\rho_4 / \rho_{a1} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.05 \times 160 = 50\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 6$

$t_3 = t_2 / t_a \times t_a = 3 \times 6 = 18$ m

$d_3 = d_2 + t_3 = 18 + 6 = 24$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	1000	1.2
2	100	6
3	102	24
4	8	~

V. Jalur 5

5.1. Titik Sounding 1

Langkah Pertama

$P_1 = (2.2 ; 4200)$

$t_1 = d_1 = 2.2$ m

$\rho_1 = 4200$ Ωm

$\rho_2 / \rho_1 = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.05 \times 4200 = 210$ Ωm

Langkah Kedua

$P_2 = (30 ; 18)$

$t_a = 30$ m

$\rho_a = 18$ Ωm

$\rho_3 / \rho_a = 0.25$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.25 \times 18 = 0.45$ Ωm

Sumbu kurva bantu H dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 14$

$t_2 = t_2 / t_1 \times t_1 = 14 \times 2.2 = 30.8$ m

$d_2 = t_1 + t_2 = 30.8 + 2.2 = 33$ m

dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	4200	2.2
2	210	33
3	0.45	~

5.2. Titik Sounding 2

Langkah Pertama

$P_1 = (1.1 ; 4400)$

$t_1 = d_1 = 1.1$ m

$\rho_1 = 4400\ \Omega m$

$\rho_2 / \rho_1 = 0.15$ (Kurva standart dan kurva bantu Q)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.15 \times 4400 = 660\ \Omega m$

Langkah Kedua

$P_2 = (9 ; 630)$

$t_a = 9$ m

$\rho_a = 630\ \Omega m$

$\rho_3 / \rho_a = 0.15$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.15 \times 630 = 11\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 7.7$

$t_2 = t_2 / t_1 \times t_1 = 7.7 \times 1.1 = 8.5$ m

$d_2 = t_1 + t_2 = 7 + 0.5 = 9.6$ m

dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	4200	2.2
2	210	33
3	0.45	~

5.3. Titik Sounding 3

Langkah Pertama

$P_1 = (1.5 ; 2400)$

$t_1 = d_1 = 1.5$ m

$\rho_1 = 2400$ Ωm

$\rho_2 / \rho_1 = 0.65$ (Kurva standart dan kurva bantu Q)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.65 \times 2400 = 1560$ Ωm

Langkah Kedua

$P_2 = (4 ; 1600)$

$t_a = 4$ m

$\rho_a = 1600$ Ωm

$\rho_3 / \rho_a = 0.15$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.15 \times 1600 = 18$ Ωm

Sumbu kurva bantu H dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 2$

$t_2 = t_2 / t_1 \times t_1 = 2 \times 1.5 = 3$ m

$d_2 = t_1 + t_2 = 3 + 1.5 = 4.5$ m

Langkah Ketiga

$P_3 = (20 : 230)$

$T_{a1} = 20$ m

$\rho_{a1} = 230$ Ωm

$\rho_4 / \rho_{a1} = 0.025$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.025 \times 230 = 5.75\ \Omega m$

Sumbu kurva bantu K dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 5.5$

$t_3 = t_2 / t_1 \times t_a = 5.5 \times 4 = 22.5$ m

$d_3 = d_2 + t_3 = 22.5 + 4.5 = 27$m

dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	2400	1.5
2	1560	4.5
3	240	27
4	5.75	~

5.4. Titik Sounding 4

Langkah Pertama

$P_1 = (0.6 ; 400)$

$t_1 = d_1 = 0.6$ m

$\rho_1 = 400\ \Omega m$

$\rho_2 / \rho_1 = 2$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 2 \times 400 = 800\ \Omega m$

Langkah Kedua

$P_2 = (7 ; 780)$

$t_a = 7$ m

$\rho_a = 780\ \Omega m$

$\rho_3 / \rho_a = 0.15$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.15 \times 780 = 117\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 7.8$

$t_2 = t_2 / t_1 \times t_1 = 7.8 \times 0.6 = 4.7$ m

$d_2 = t_1 + t_2 = 4.7 + 0.6 = 5.3$ m

Langkah Ketiga

$P_3 = (30 : 110)$

$t_{a1} = 30$ m

$\rho_{a1} = 110\ \Omega m$

$\rho_4 / \rho_{a1} = 0.25$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.25 \times 110 = 2.75\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 3$

$t_3 = t_2 / t_1 \times t_a = 3 \times 7 = 21$

$d_3 = d_2 + t_3 = 21 + 5.3 = 26.3$ m

dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	400	0.6
2	800	5.28
3	117	26.4
4	2.75	~

5.5. Titik Sounding 5

Langkah Pertama

$P_1 = (0.8 ; 185)$

$t_1 = d_1 = 0.8$ m

$\rho_1 = 185\ \Omega m$

$\rho_2 / \rho_1 = 2$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 2 \times 185 = 370\ \Omega m$

Langkah Kedua

$P_2 = (4.2 ; 320)$

$t_a = 4.2$ m

$\rho_a = 320\ \Omega m$

$\rho_3 / \rho_a = 0.3$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.3 \times 320 = 96\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 3.375$

$t_2 = t_2 / t_1 \times t_1 = 3.375 \times 0.8 = 2.7$ m

$d_2 = t_1 + t_2 = 2.7 + 0.8 = 3.5$ m

Langkah Ketiga

$P_3 = (40 : 98)$

$t_{a1} = 40$ m

$\rho_{a1} = 98\ \Omega m$

$\rho_4 / \rho_{a1} = 0.025$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.025 \times 98 = 2.45\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 6,5$

$t_3 = t_2 / t_a \times t_a = 6.5 \times 4.2 = 27.4$ m

$d_3 = d_2 + t_3 = 27.4 + 3.5 = 30.9$ m

Dari keseluruhan Proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	185	0.87
2	370	3.48
3	96	30.9
4	2.45	~

VI. Jalur 6

6.1. Titik Sounding 1

Langkah Pertama

$P_1 = (1.3 ; 2150)$

$t_1 = d_1 = 1.3$

$\rho_1 = 2150\ \Omega m$

$\rho_2 / \rho_1 = 10$ (Kurva standart dan kurva bantu Q)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 10 \times 2150 = 21500\ \Omega m$

Langkah Kedua

$P_2 = (3.5 ; 4200)$

$t_a = 3.5$ m

$\rho_a = 4200\ \Omega m$

$\rho_3 / \rho_a = 15$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 15 \times 4200 = 6300\ \Omega m$

Sumbu kurva bantu H dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 17$

$t_2 = t_2 / t_1 \times t_1 = 17 \times 1.3 = 2.2$ m

$d_2 = t_1 + t_2 = 1.3 + 2.2 = 3.5$ m

Langkah Ketiga

$P_3 = (6.8 : 5000)$

$t_{a1} = 6.8$ m

$\rho_{a1} = 5000\ \Omega m$

$\rho_4 / \rho_{a1} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.01 \times 5000 = 50\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 0.88$

$t_3 = t_2 / t_a \times t_a = 0.88 \times 3.5 = 3.1$ m

$d_3 = d_2 + t_3 = 3.5 + 3.1 = 6.6$ m

Langkah Keempat

$P_4 = (34 ; 70)$

$t_{a2} = 34$ m

$\rho_{a2} = 70\ \Omega m$

$\rho_5 / \rho_{a2} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.05 \times 70 = 3.5\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 4$

$t_4 = t_2 / t_1 \times t_{a1} = 4 \times 6.8 = 27.4$ m

$d_4 = d_3 + t_4 = 6.6 + 27.4 = 34$ m

Langkah kelima

$P_5 = (17.5 ; 1100)$

$t_{a3} = 17.5$ m

$\rho_{a2} = 1100\ \Omega m$

$\rho_5 / \rho_{a2} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.01 \times 1100 = 11\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 0.16$

$t_5 = t_2 / t_1 \times t_{a2} = 0.16 \times 12 = 2$ m

$d_5 = d_4 + t_5 = 10 + 1 = 11$ m

dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	2150	1.3
2	21500	3.5
3	4200	6.6
4	50	34
5	3.5	11
6	11	~

6.2. Titik Sounding 2

Langkah Pertama

$P_1 = (1.5 ; 700)$

$t_1 = d_1 = 1.5$ m

$\rho_1 = 700\ \Omega m$

$\rho_2 / \rho_1 = 3.5$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 3.5 \times 700 = 2450\ \Omega m$

Langkah Kedua

$P_2 = (3.8 ; 9300)$

$t_a = 3.8$ m

$\rho_a = 9300\ \Omega m$

$\rho_3 / \rho_a = 1.25$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 1.25 \times 9300 = 11625\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 0.6$

$t_2 = t_2 / t_1 \times t_1 = 0.6 \times 1.5 = 0.9$ m

$d_2 = t_1 + t_2 = 0.6 + 1.5 = 2.4$ m

Langkah Ketiga

$P_3 = (4.4 : 4200)$

$t_{a1} = 4.4$ m

$\rho_{a1} = 4200\ \Omega m$

$\rho_4 / \rho_{a1} = 0.1$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.1 \times 4200 = 420$ Ωm

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 0.5$

$t_3 = t_2 / t_a \times t_a = 0.5 \times 3.8 = 2.2$ m

$d_3 = d_2 + t_3 = 2.2 + 2.4 = 4.6$ m

Langkah Keempat

$P_4 = (9 ; 5200)$

$t_{a2} = 9$ m

$\rho_{a2} = 5000$ Ωm

$\rho_5 / \rho_{a2} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.01 \times 5200 = 5.2$ Ωm

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 4.4$

$t_4 = t_2 / t_1 \times t_{a1} = 1 \times 4.4 = 4.4$ m

$d_4 = d_3 + t_4 = 4.6 + 4.4 = 9$ m

Langkah kelima

$P_5 = (30 ; 420)$

$t_{a3} = 30$ m

$\rho_{a2} = 420$ Ωm

$\rho_5 / \rho_{a2} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.01 \times 420 = 4.2\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 3$

$t_5 = t_2 / t_1 \times t_{a2} = 3 \times 9 = 27$ m

$d_5 = d_4 + t_5 = 27 + 9 = 36$ m

dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	700	1.5
2	2450	2.4
3	11625	4.6
4	420	9
5	52	36
6	4.2	~

6.3. Titik Sounding 3

Langkah Pertama

$P_1 = (1.3 ; 620)$

$t_1 = d_1 = 1.3$ m

$\rho_1 = 620\ \Omega m$

$\rho_2 / \rho_1 = 7$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 7 \times 620 = 4340\ \Omega m$

Langkah Kedua

$P_2 = (9 ; 1800)$

$t_a = 9$ m

$\rho_a = 1800 \Omega m$

$\rho_3 / \rho_a = 0.15$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.15 \times 1800 = 270\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 4$

$t_2 = t_2 / t_1 \times t_1 = 4 \times 1.3 = 5.2$ m

$d_2 = t_1 + t_2 = 5.2 + 1.3 = 6.5$ m

Langkah Ketiga

$P_3 = (11 : 450)$

$t_{a1} = 11$ m

$\rho_{a1} = 450\ \Omega m$

$\rho_4 / \rho_{a1} = 0.07$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.07 \times 450 = 31.5\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 0.5$

$t_3 = t_2 / t_a \times t_a = 0.5 \times 9 = 4.5$ m

$d_3 = d_2 + t_3 = 4.5 + 6.5 = 11$ m

Langkah Keempat

$P_4 = (40 ; 37)$

$t_{a2} = 40$ m

$\rho_{a2} = 37\ \Omega m$

$\rho_5 / \rho_{a2} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.05 \times 37 = 1.85\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 3$

$t_4 = t_2 / t_1 \times t_{a1} = 3 \times 11 = 33$ m

$d_4 = d_3 + t_4 = 11 + 33 = 44$ m

dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	620	1.3
2	4340	6.5
3	270	11
4	31.5	44
5	1.85	~

6.4. Titik Sounding 4

Langkah Pertama

$P_1 = (1.2 ; 490)$

$t_1 = d_1 = 1.2$ m

$\rho_1 = 490\ \Omega m$

$\rho_2 / \rho_1 = 2.5$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 2.5 \times 490 = 1125\ \Omega m$

Langkah Kedua

$P_2 = (2.7 ; 750)$

$t_a = 2.7$ m

$\rho_a = 750\ \Omega m$

$\rho_3 / \rho_a = 0.4$(Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.4 \times 750 = 300\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 1.25$

$t_2 = t_2 / t_1 \times t_1 = 1.25 \times 1.2 = 1.5$ m

$d_2 = t_1 + t_2 = 1.5 + 1.2 = 2.7$ m

Langkah Ketiga

$P_3 = (7.5 : 340)$

$t_{a1} = 7.5$ m

$\rho_{a1} = 340\ \Omega m$

$\rho_4 / \rho_{a1} = 0.3$ (Kurva standart dan kurva bantu Q)

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 2$

$t_3 = t_2 / t_1 \times t_a = 2 \times 2.5 = 5$ m

$d_3 = d_2 + t_3 = 2.7 + 5 = 7.7$ m

Langkah Keempat

$P_4 = (30 ; 120)$

$t_{a2} = 30$ m

$\rho_{a2} = 120\ \Omega m$

$\rho_5 / \rho_{a2} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.01 \times 120 = 1.2\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 3.5$

$t_4 = t_2 / t_1 \times t_{a1} = 3.5 \times 7.5 = 26.3$ m

$d_4 = d_3 + t_4 = 7.7 + 26.3 = 34$ m

dari keseluruhan proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	490	1.2
2	1225	2.1
3	300	7.75
4	102	34
5	1.2	~

6.5. Titik Sounding 5

Langkah Pertama

$P_1 = (1.3 ; 760)$

$t_1 = d_1 = 1.3$ m

$\rho_1 = 760\ \Omega m$

$\rho_2 / \rho_1 = 2$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 2 \times 760 = 1520\ \Omega m$

Langkah Kedua

$P_2 = (3.1 ; 1000)$

$t_a = 3.1$ m

$\rho_a = 1000\ \Omega m$

$\rho_3 / \rho_a = 0.2$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.2 \times 1000 = 200\ \Omega m$

Sumbu kurva bantu Q dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 1.5$

$t_2 = t_2 / t_1 \times t_1 = 1.5 \times 1.3 = 1.9$ m

$d_2 = t_1 + t_2 = 1.9 + 1.3 = 3.2$ m

Langkah Ketiga

$P_3 = (17 : 270)$

$t_{a1} = 17$ m

$\rho_{a1} = 270\ \Omega m$

$\rho_4 / \rho_{a1} = 0.15$ (Kurva standart dan kurva bantu Q)

Sumbu kurva bantu Q dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 4$

$t_3 = t_2 / t_a \times t_a = 4 \times 3.1 = 12.4$ m

$d_3 = d_2 + t_3 = 12.4 + 1.9 = 14.3$ m

Langkah Keempat

$P_4 = (35 ; 50)$

$t_{a2} = 35$ m

$\rho_{a2} = 50\ \Omega m$

$\rho_5 / \rho_{a2} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.05 \times 50 = 2.5\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 1.5$

$t_4 = t_2 / t_1 \times t_{a1} = 1.5 \times 17 = 25.7$ m

$d_4 = d_3 + t_4 = 14.3 + 25.7 = 40$ m

Dari keseluruhan Proses diperoleh :

Lapisan	Resisitivitas (Ohm)	Kedalamaan (m)
1	760	1.3
2	1520	3.2
3	200	14.3
4	40.5	40
5	2.5	~

IX. Jalur 9

9.1.. Titik Sounding 1

Langkah Pertama

$P_1 = (1.1 ; 2200)$

$t_1 = d_1 = 1.1$ m

$\rho_1 = 2200\ \Omega m$

$\rho_2 / \rho_1 = 5$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 5 \times 2200 = 11000\ \Omega m$

Langkah Kedua

$P_2 = (2 ; 3250)$

$t_a = 2$ m

$\rho_a = 3250\ \Omega m$

$\rho_3 / \rho_a = 1.25$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 1.25 \times 3250 = 4062.5\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 1$

$t_2 = t_2 / t_1 \times t_1 = 1 \times 1.1 = 1.1$ m

$d_2 = t_1 + t_2 = 1.1 + 1.1 = 2.2$ m

Langkah Ketiga

$P_3 = (5 : 4200)$

$T_{a1} = 5$ m

$\rho_{a1} = 4200\ \Omega m$

$\rho_4 / \rho_{a1} = 0.3$` (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.3 \times 4200 = 1260\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 1.4$

$t_3 = t_2 / t_a \times t_a = 1.4 \times 2 = 2.8$ m

$d_3 = d_2 + t_3 = 2.8 + 2.2 = 5$ m

Langkah Keempat

$P_4 = (8.2 ; 3000)$

$t_{a2} = 8.2$ m

$\rho_{a2} = 3000\ \Omega m$

$\rho_5 / \rho_{a2} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.05 \times 3000 = 150\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 0.5$

$t_4 = t_2 / t_1 \times t_{a1} = 0.5 \times 5 = 2.5$ m

$d_4 = d_3 + t_4 = 5 + 2.5 = 7.5$ m

Langkah kelima

$P_5 = (25 ; 190)$

$t_{a3} = 25$ m

$\rho_{a2} = 190\ \Omega m$

$\rho_5 / \rho_{a2} = 0.05$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.05 \times 190 = 9.5\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 1.5$

$t_5 = t_2 / t_1 \times t_{a2} = 1.5 \times 8.25 = 12.5$ m

$d_5 = d_4 + t_5 = 12.5 + 7.5 = 20$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	2200	1.1
2	11000	2.3
3	4062.5	5
4	1260	37.5
5	150	20
6	9.5	~

9.4.. Titik Sounding 4

Langkah Pertama

$P_1 = (1.2 ; 250)$

$t_1 = d_1 = 1.2$ m

$\rho_1 = 250\ \Omega m$

$\rho_2 / \rho_1 = 3.5$ (Kurva standart dan kurva bantu K)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 3.5 \times 250 = 875\ \Omega m$

Langkah Kedua

$P_2 = (4.8 ; 550)$

$t_a = 4.8$ m

$\rho_a = 550\ \Omega m$

$\rho_3 / \rho_a = 0.3$ (Kurva standart dan kurva bantu K)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.3 \times 550 = 165\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 3.3$

$t_2 = t_2 / t_1 \times t_1 = 3.3 \times 1.2 = 4$ m

$d_2 = t_1 + t_2 = 1.2 + 4 = 5.2$ m

Langkah Ketiga

$P_3 = (16 : 230)$

$T_{a1} = 16$ m

$\rho_{a1} = 230\ \Omega m$

$\rho_4 / \rho_{a1} = 0.1$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.1 \times 230 = 23\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 2.25$

$t_3 = t_2 / t_a \times t_a = 2.25 \times 4.8 = 10.8$ m

$d_3 = d_2 + t_3 = 10.8 + 5.2 = 5$ m

Langkah Keempat

$P_4 = (40 ; 35)$

$t_{a2} = 40$ m

$\rho_{a2} = 35\ \Omega m$

$\rho_5 / \rho_{a2} = 0.01$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.01 \times 35 = 0.35\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 1.75$

$t_4 = t_2 / t_1 \times t_{a1} = 1.75 \times 16 = 28$ m

$d_4 = d_3 + t_4 = 28 + 16 = 44$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	250	1.2
2	875	5.2
3	165	16
4	23	44
5	0.35	~

9.5.. Titik Sounding 5

Langkah Pertama

$P_1 = (1.7 ; 498)$

$t_1 = d_1 = 1.7$ m

$\rho_1 = 498\ \Omega m$

$\rho_2 / \rho_1 = 0.5$ (Kurva standart dan kurva bantu H)

$\rho_2 = \rho_2 / \rho_1 \times \rho_1 = 0.5 \times 498 = 249\ \Omega m$

Langkah Kedua

$P_2 = (6.3 ; 244.6)$

$t_a = 6.3$ m

$\rho_a = 244.6\ \Omega m$

$\rho_3 / \rho_a = 0.65$ (Kurva standart dan kurva bantu Q)

$\rho_3 = \rho_3 / \rho_a \times \rho_a = 0.65 \times 244.6 = 159\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_1 , didapat P_2 pada $t_2 / t_1 = 2.5$

$t_2 = t_2 / t_1 \times t_1 = 2.5 \times 1.7 = 4.3$ m

$d_2 = t_1 + t_2 = 4.3 + 1.7 = 6$ m

Langkah Ketiga

$P_3 = (20 : 178)$

$T_{a1} = 20$ m

$\rho_{a1} = 178\ \Omega m$

$\rho_4 / \rho_{a1} = 0.1$ (Kurva standart dan kurva bantu Q)

$\rho_4 = \rho_4 / \rho_{a1} \times \rho_{a1} = 0.1 \times 178 = 17.8\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_2 didapat P_3 pada $t_2 / t_1 = 2.5$

$t_3 = t_2 / t_a \times t_a = 2.5 \times 6.3 = 15.7$ m

$d_3 = d_2 + t_3 = 15.7 + 6 = 21.7$ m

Langkah Keempat

$P_4 = (40 ; 22.8)$

$t_{a2} = 40$ m

$\rho_{a2} = 22.8\ \Omega m$

$\rho_5 / \rho_{a2} = 0.07$ (Kurva standart dan kurva bantu Q)

$\rho_5 = \rho_5 / \rho_{a2} \times \rho_{a2} = 0.07 \times 22.8 = 1.6\ \Omega m$

Sumbu kurva bantu A dihimpit pada P_3 didapat P_4 pada $t_2 / t_1 = 1.75$

$t_4 = t_2 / t_1 \times t_{a1} = 1.75 \times 20 = 32.3$ m

$d_4 = d_3 + t_4 = 32.3 + 21.7 = 54$ m

Dari keseluruhan proses diperoleh :

Lapisan	Resistivitas (Ohm)	Kedalamaan (m)
1	498	1.7
2	875	3.2
3	159	21.7
4	17.8	54
5	1.6	~